

Fig. 1.

200

$n_{2,1}$
 $A_{\text{eff},1}$
 D_1

$n_{2,2}$
 $A_{\text{eff},2}$
 D_2

50:50 Coupler

Fig. 2

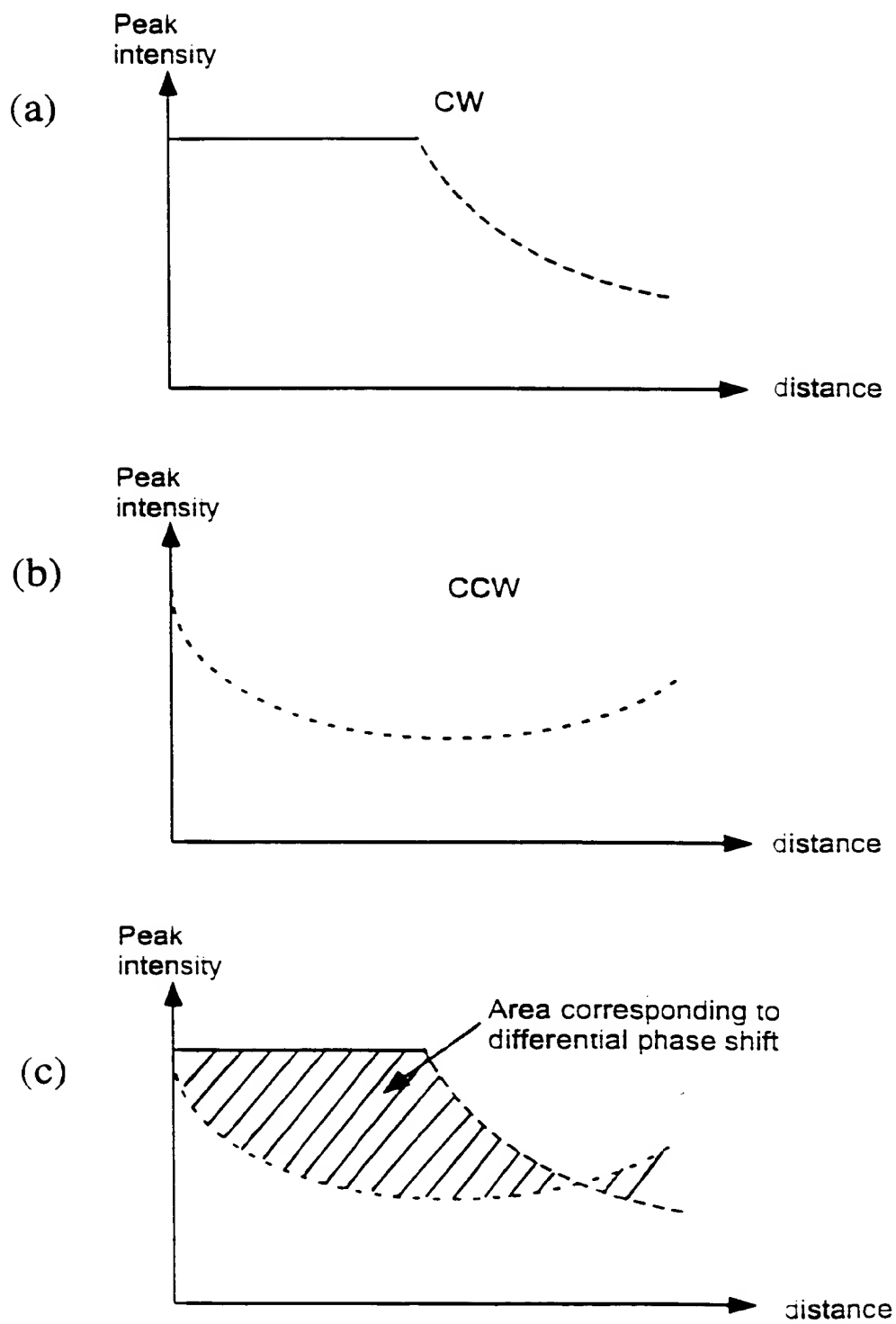


Fig. 3

FIG. 4

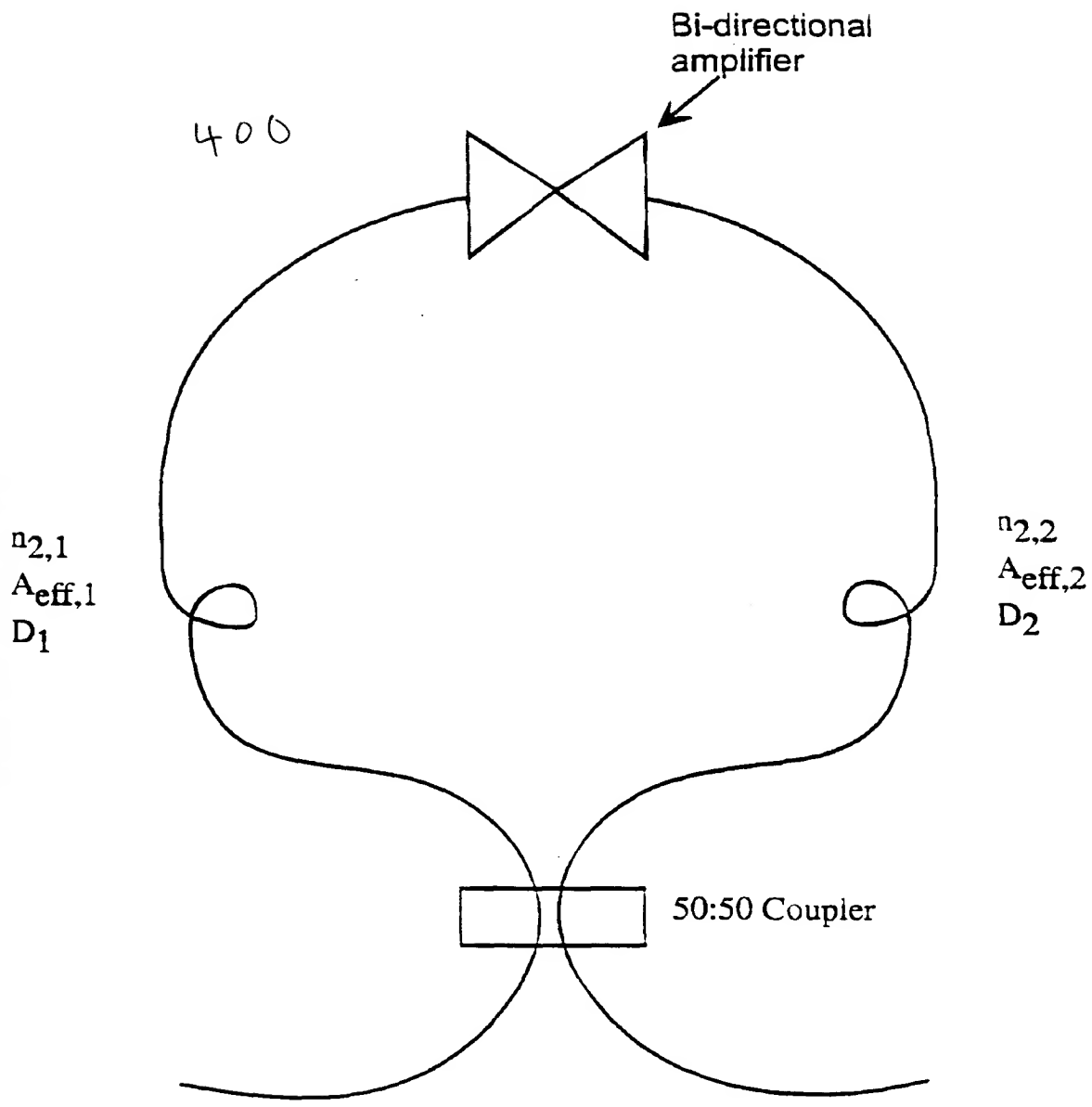


Fig. 4.

500

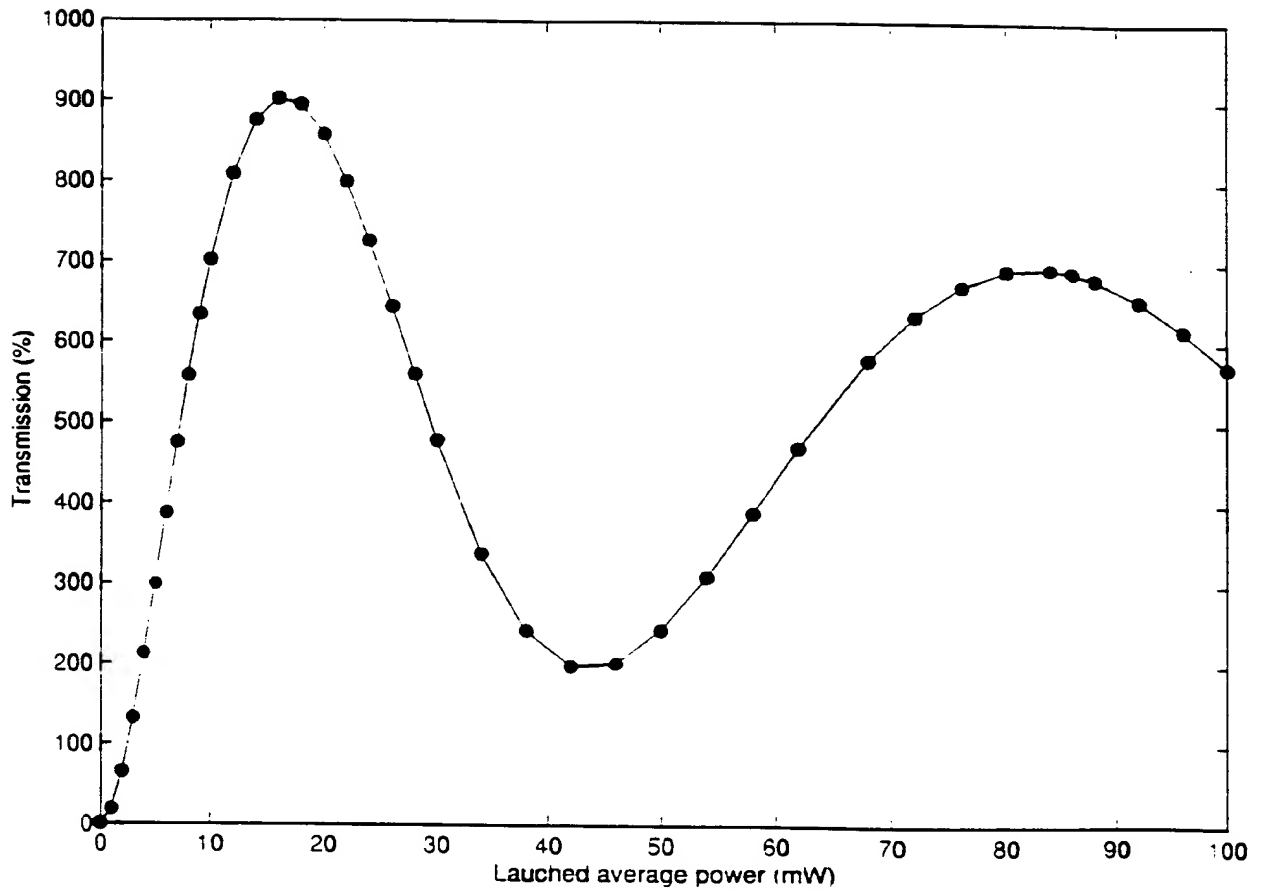


Fig. 5.

05449-64401

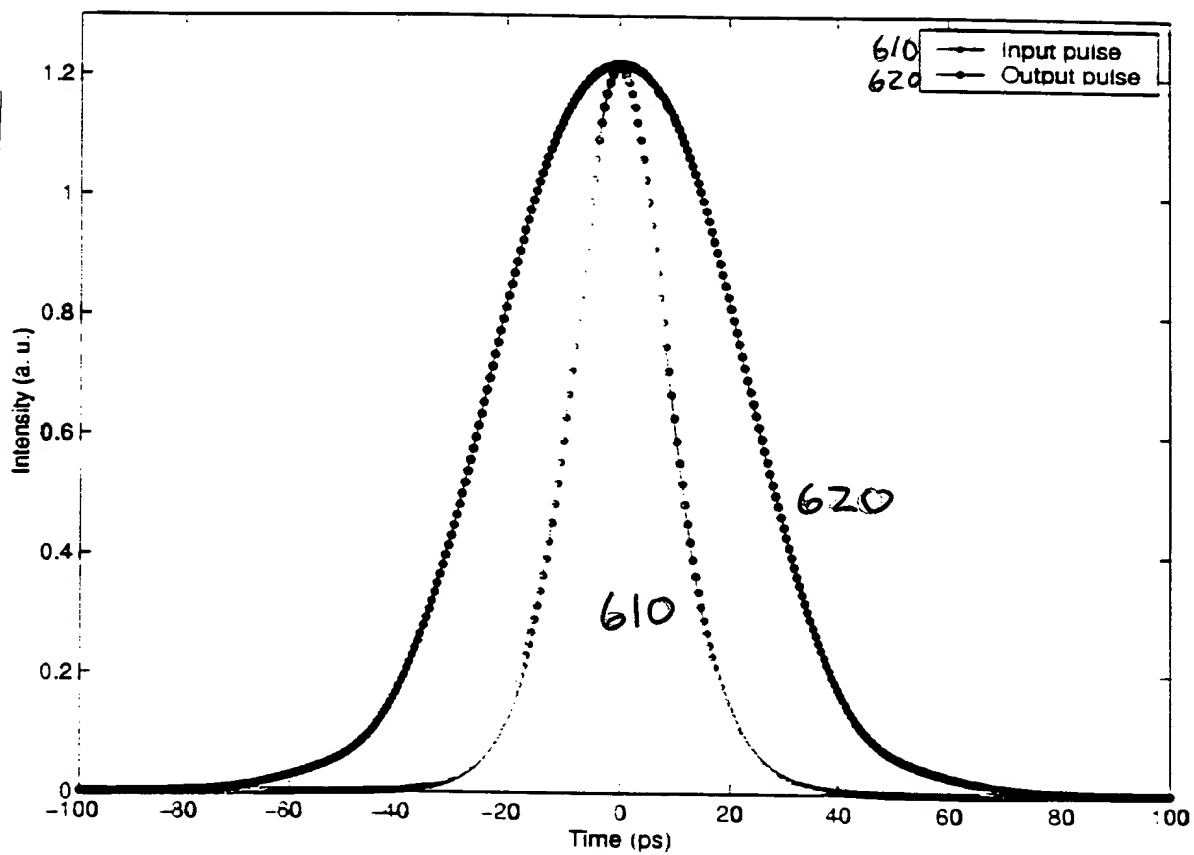


Fig. 6 (a)

04764649-001401

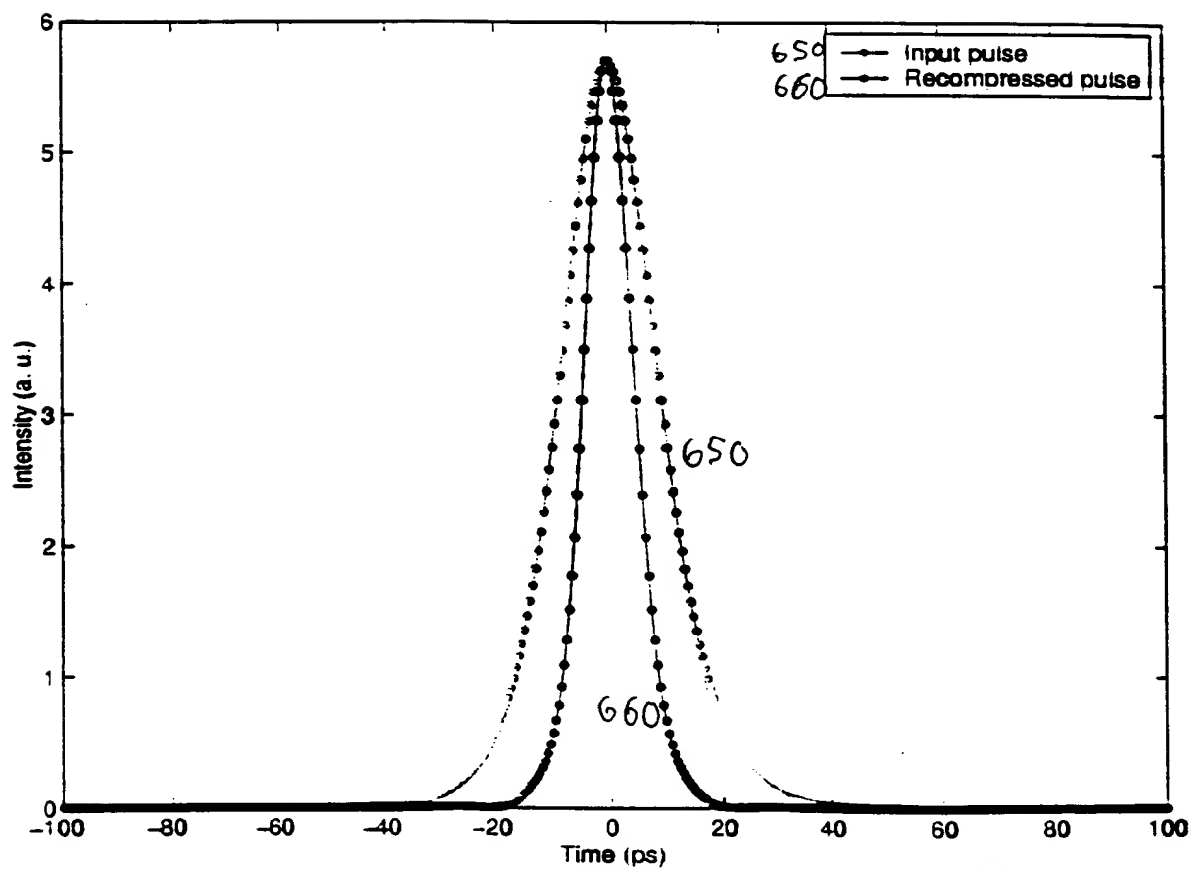


Fig. 6(b)

700

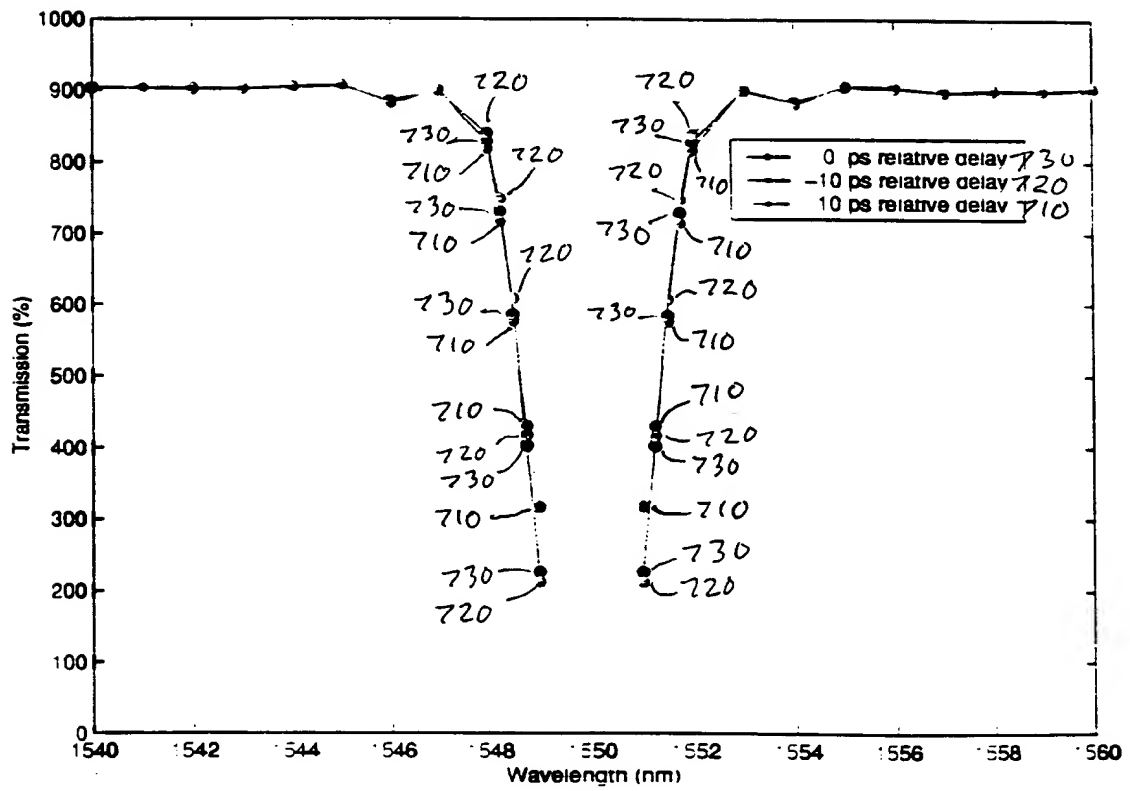


Fig. 7

800

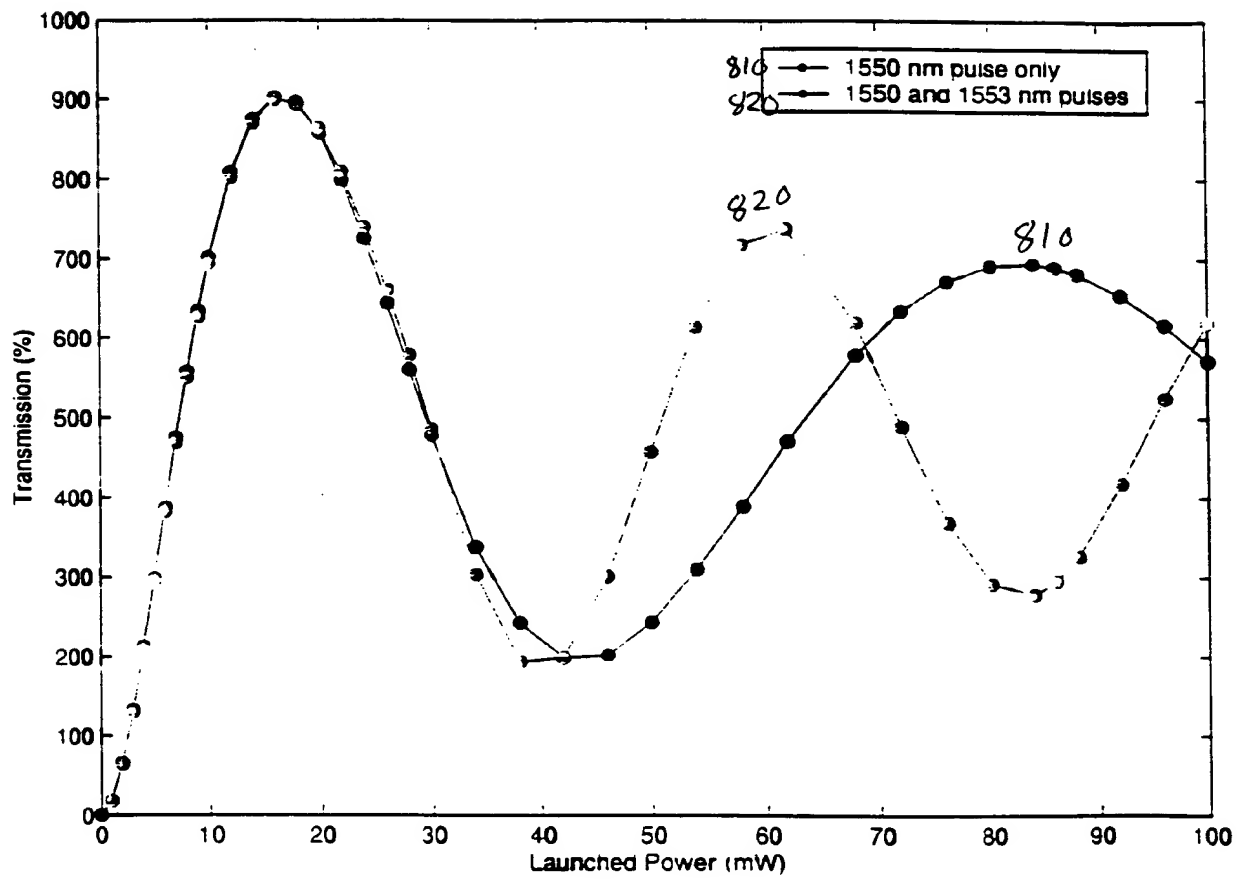


Fig. 8

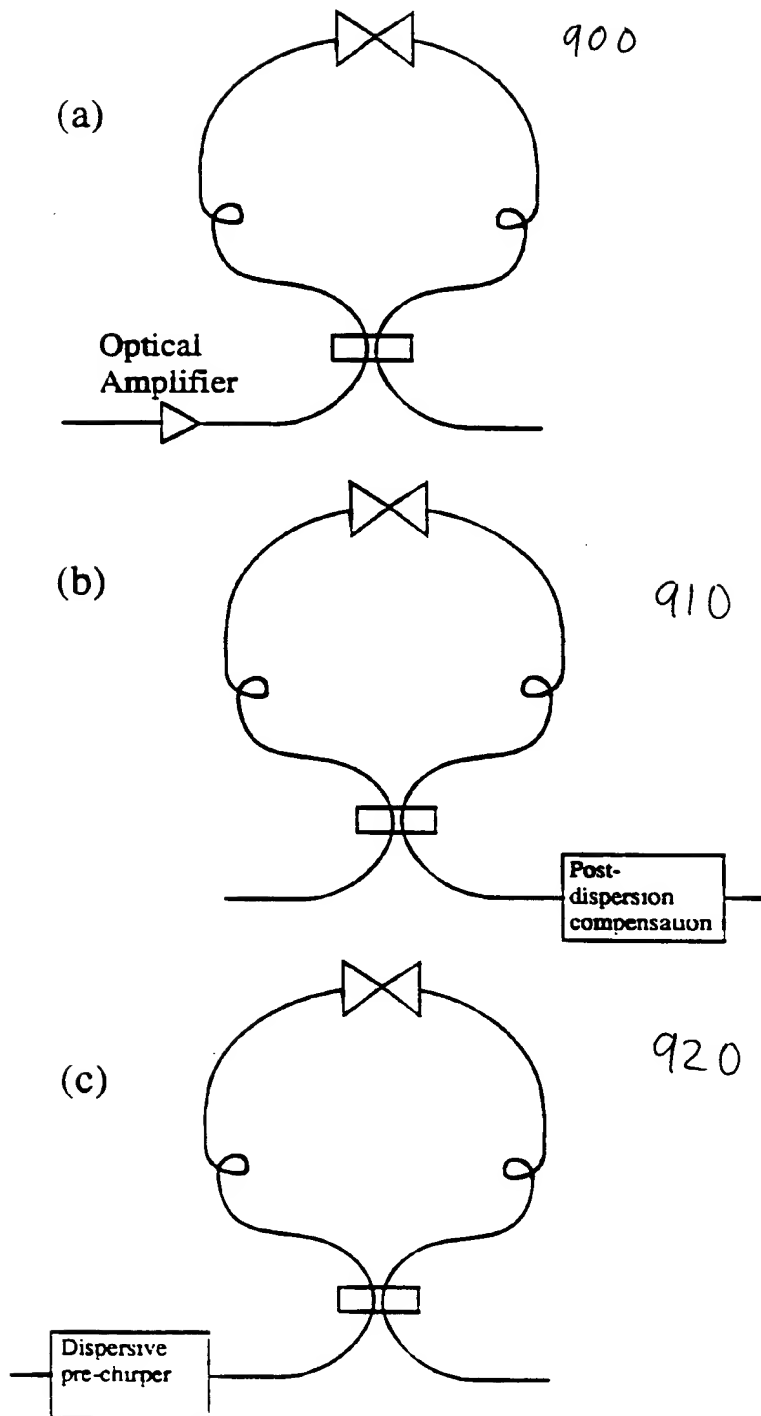


Fig. 9

1000

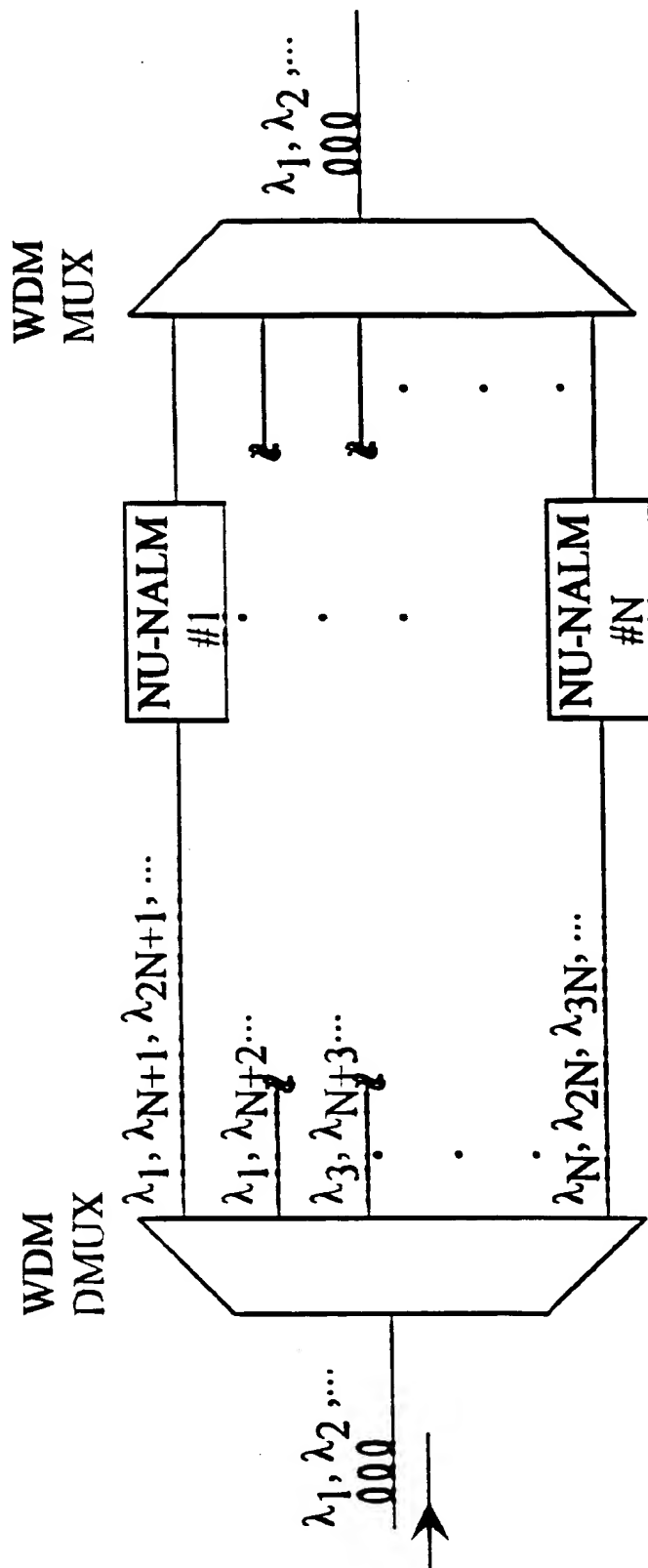


Fig 10.

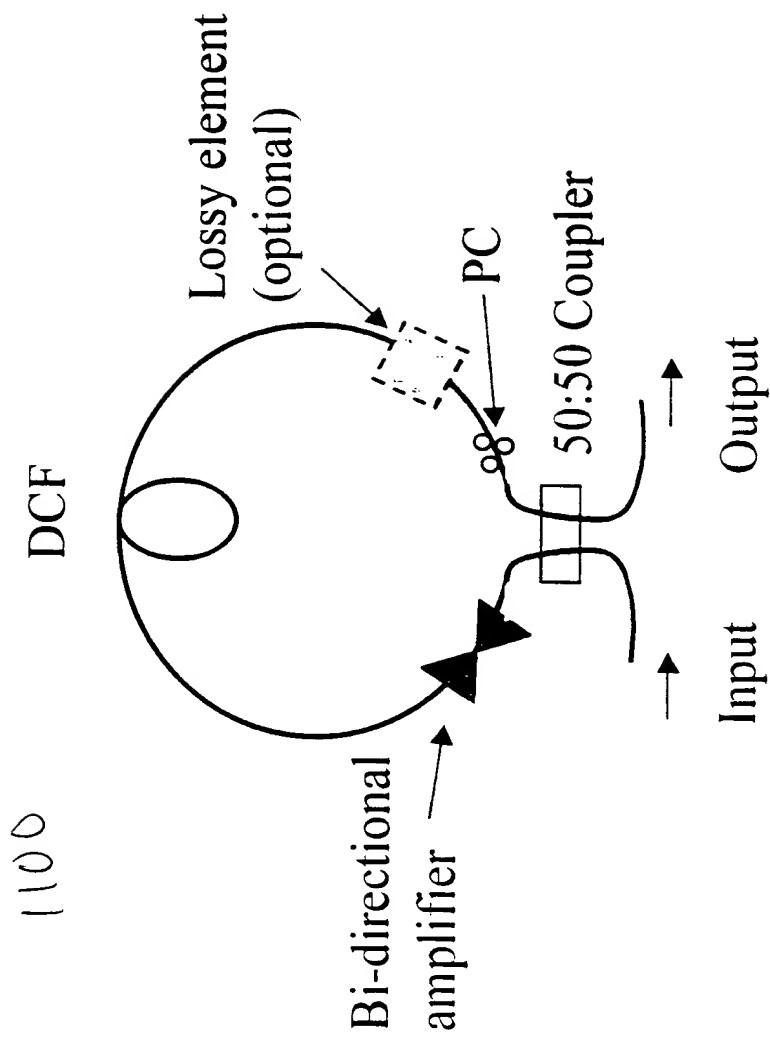


Fig. 11

1200

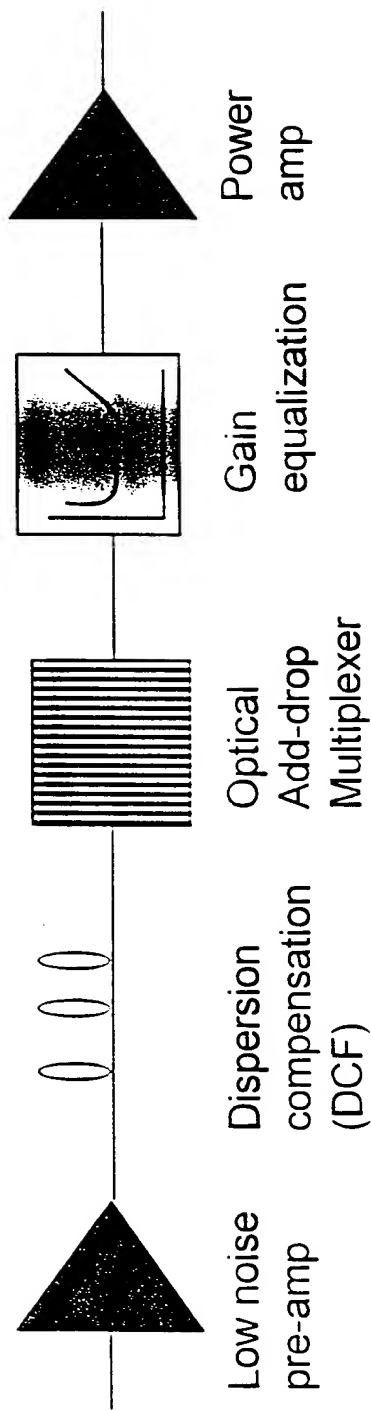


Fig. 12

1300

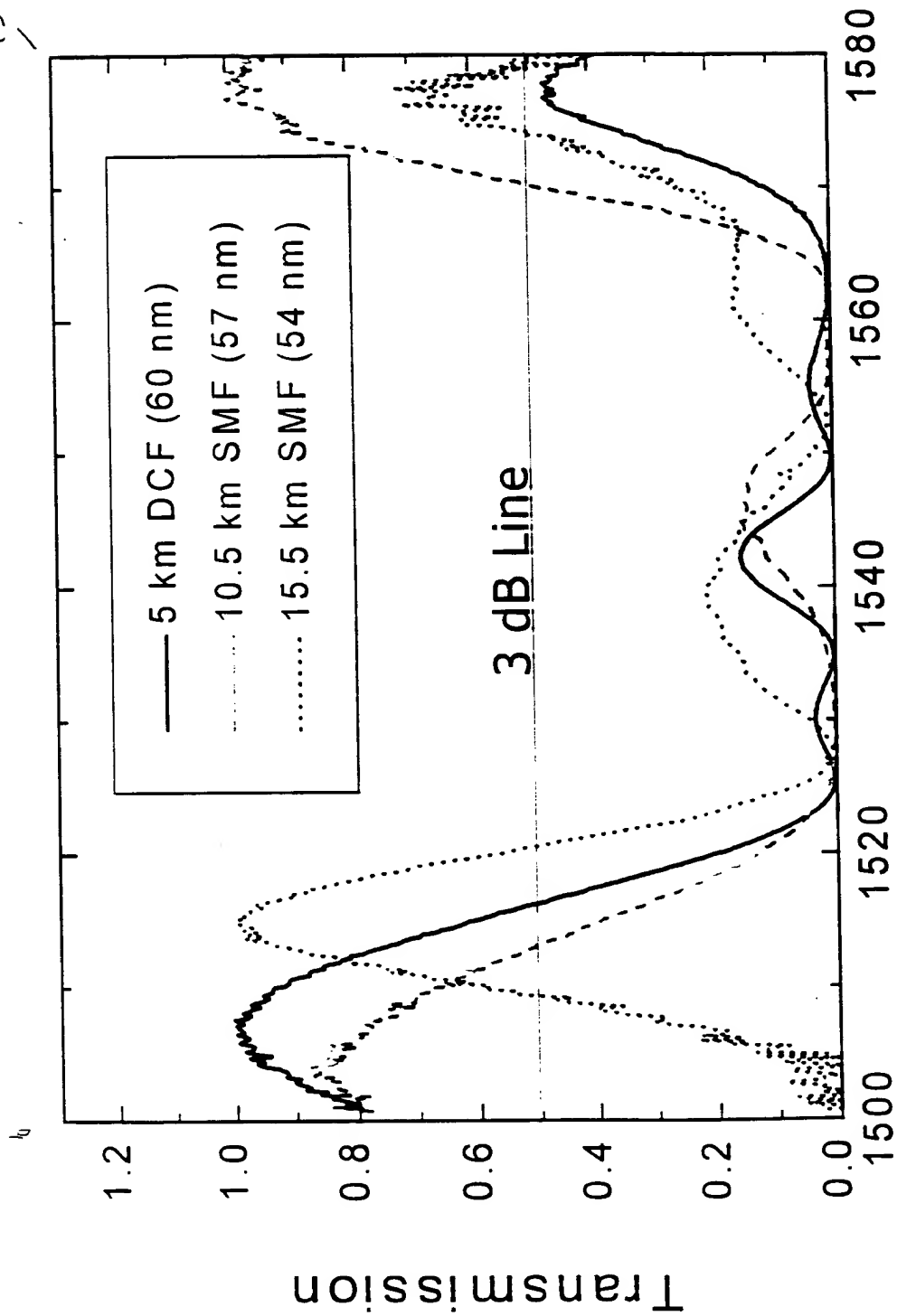


Fig. 13

Wavelength [nm]

Fig. 14-(a)

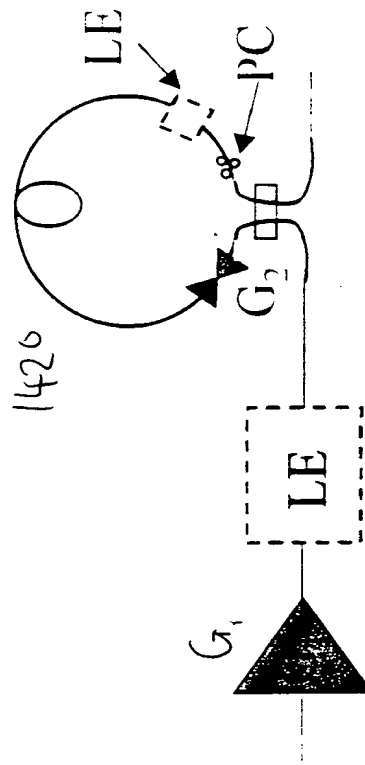
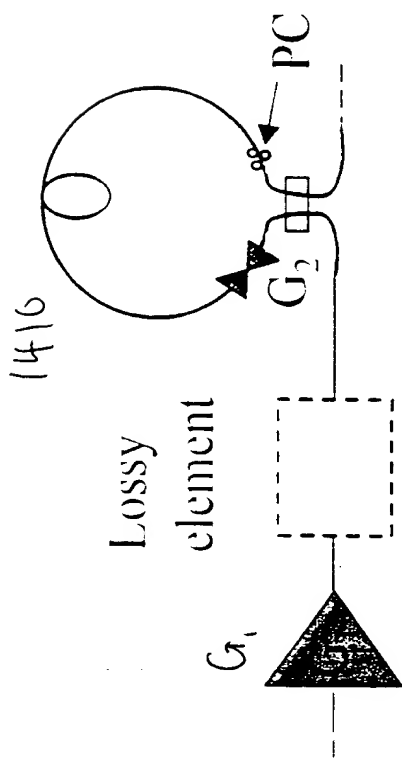


Fig. 14-(b)

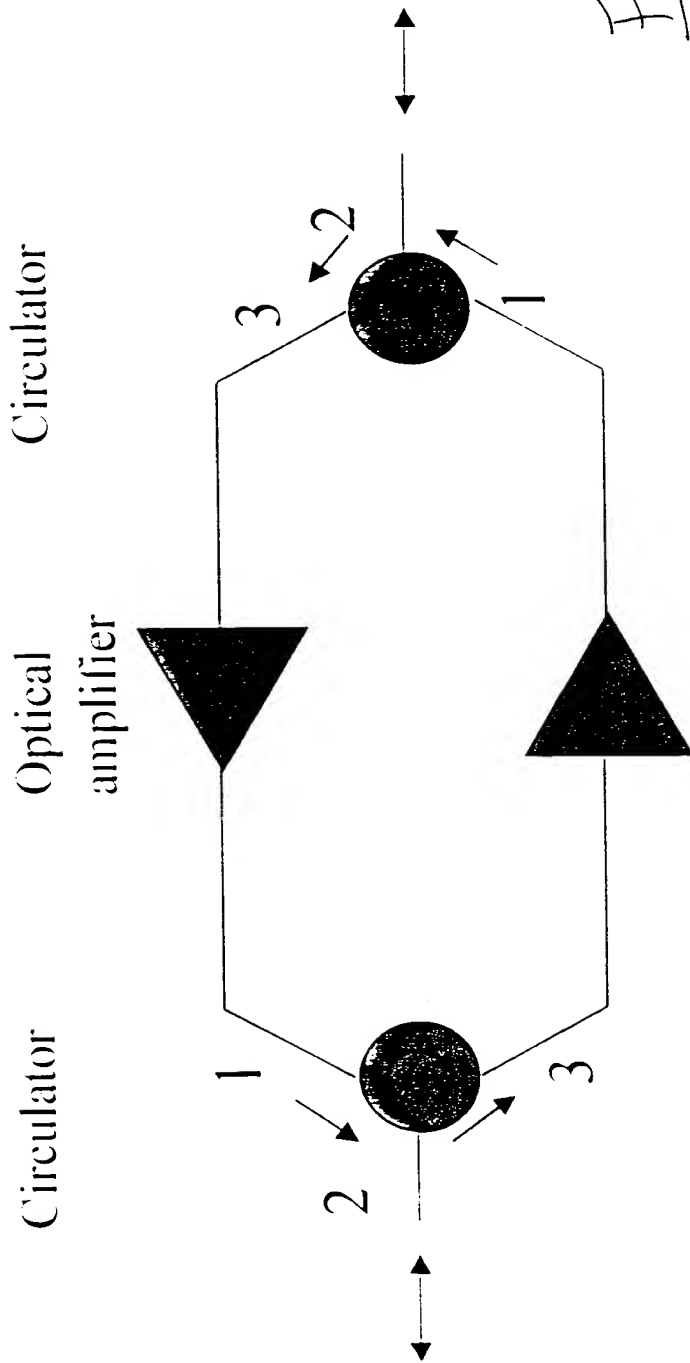
1406

1430

P_{in} (dBm)	G_1 (dB)	G_2 (dB)	P_{out} (dBm)
-11	0	30	9.18
-11	5	25	9.17
-11	10	20	9.16
-11	15	15	9.10

Fig. 14-(c)

1560



1600

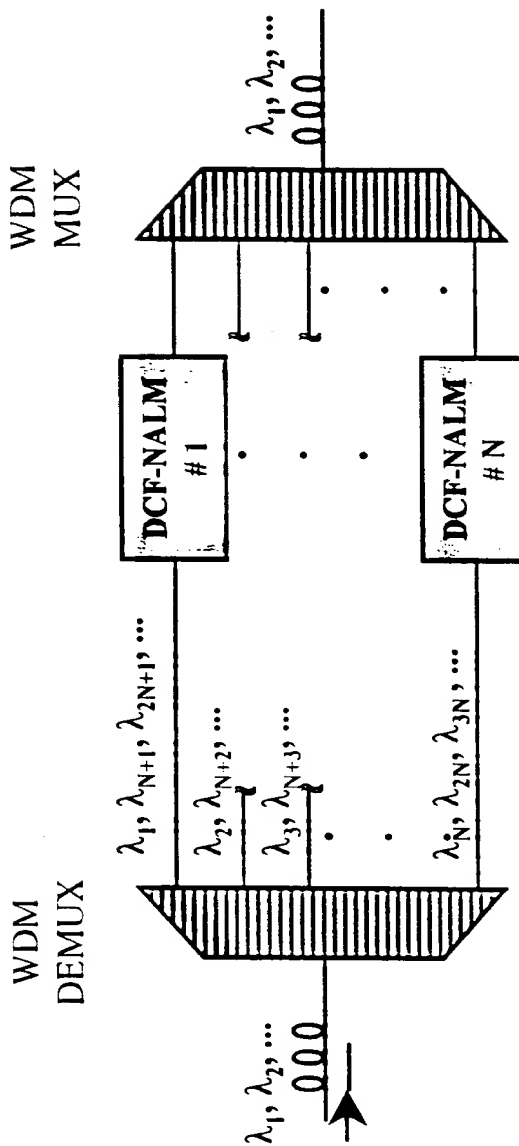


Fig. 16

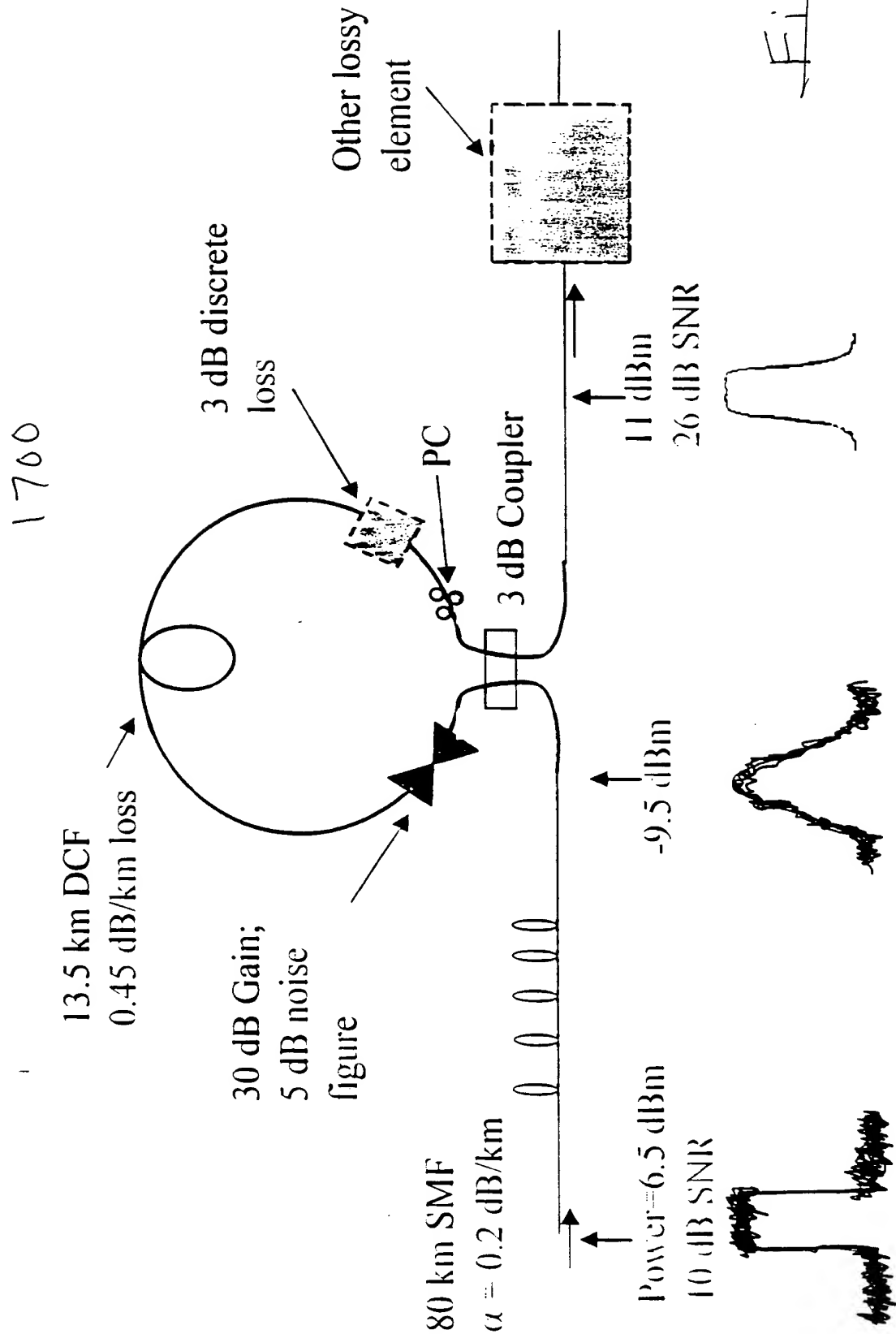
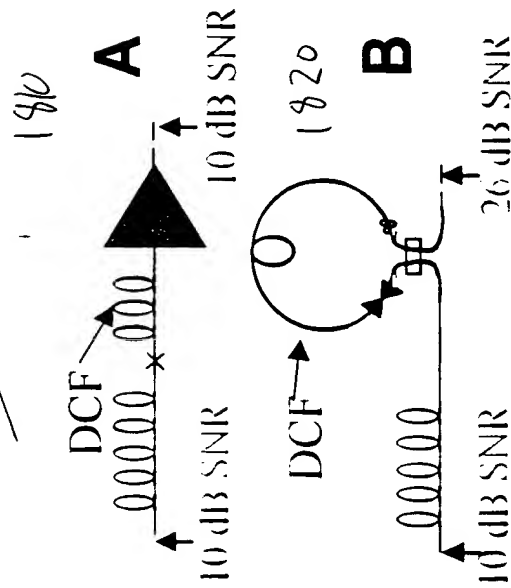


Fig. 17

Fig. 18 (a)



Assumptions:

- 10 dB input SNR (5 GHz bandwidth)
- 5 dB amplifier NF

Results:

- 16 dB improvement in SNR

Fig. 18 (b)

1800

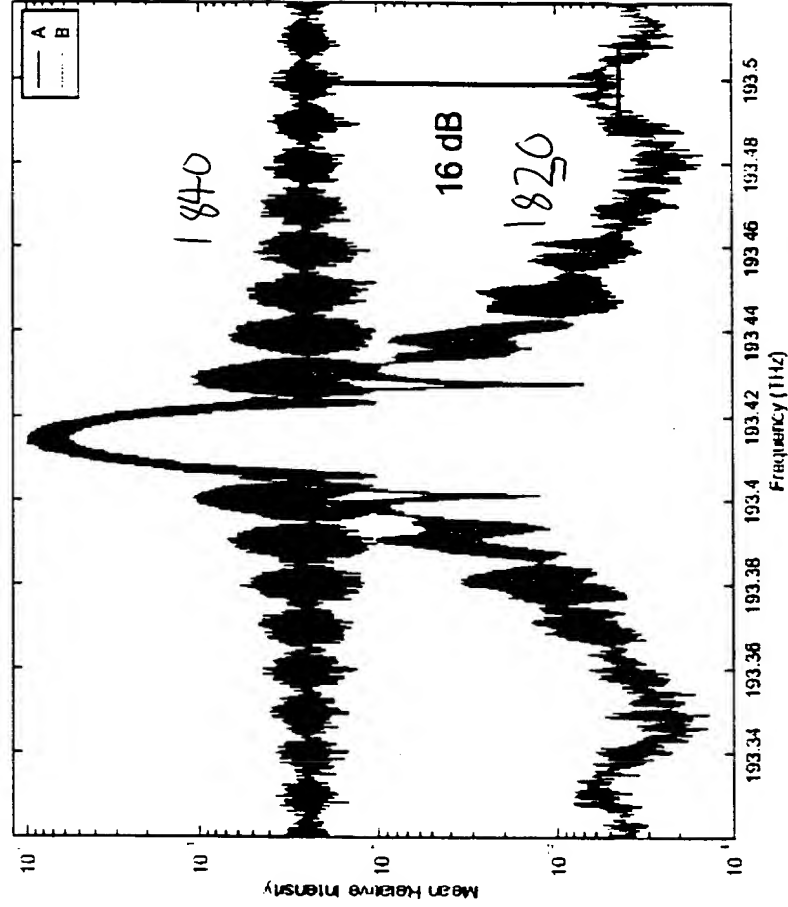


Fig. 18 (c)

104720" 64948460

1900

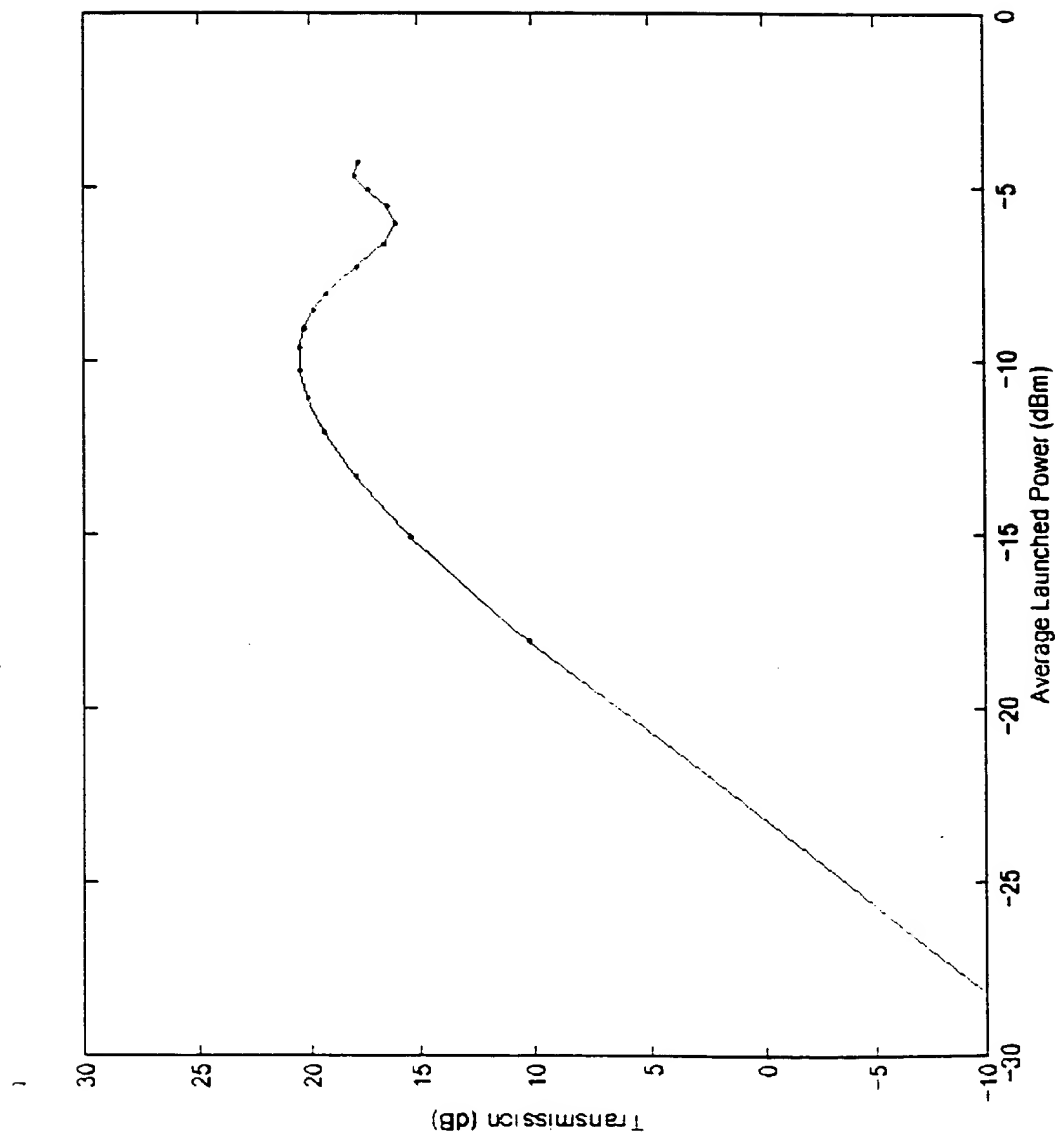


Fig. 19

LD420" 64948/50

2000

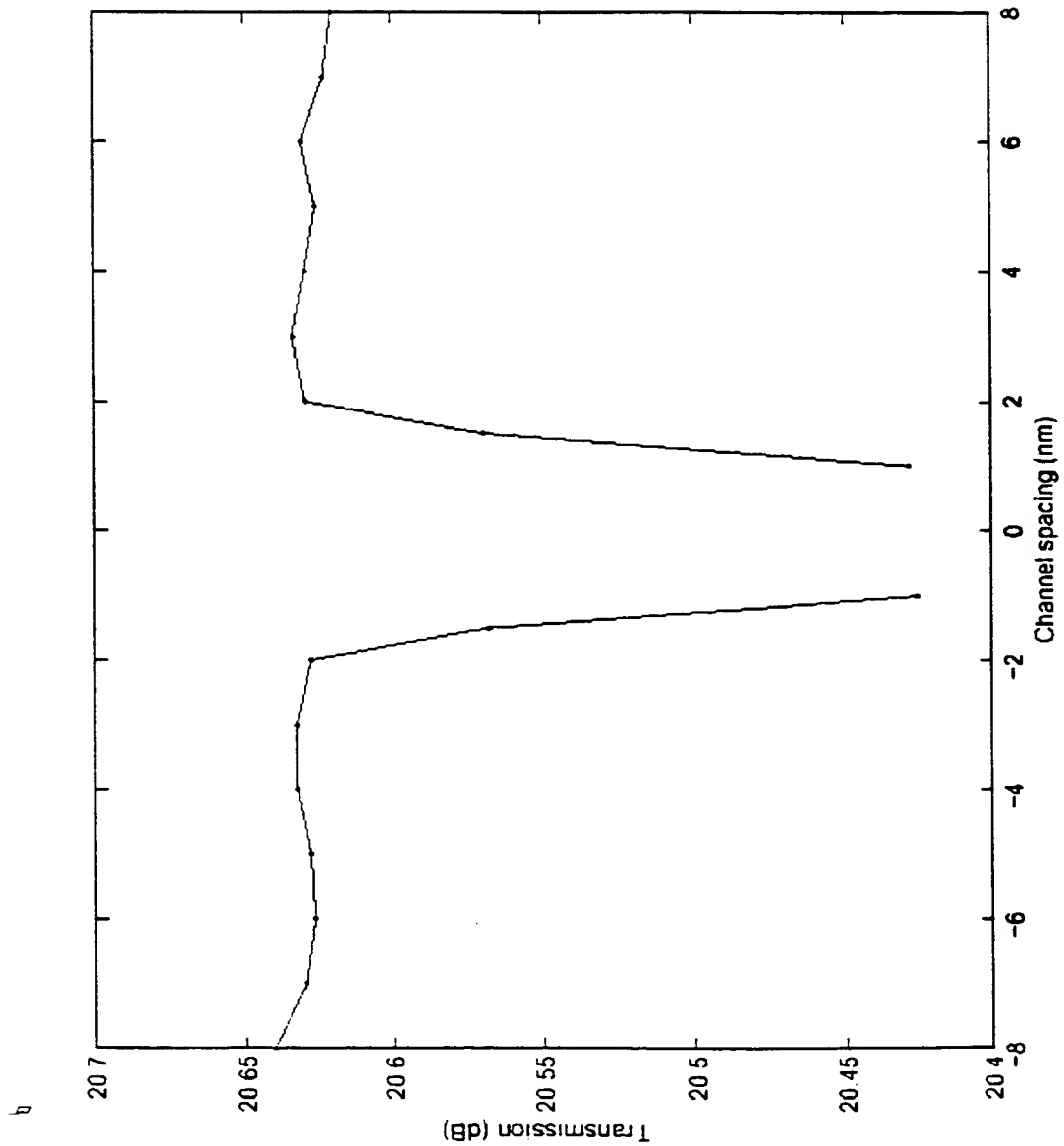


Fig. 20

2100

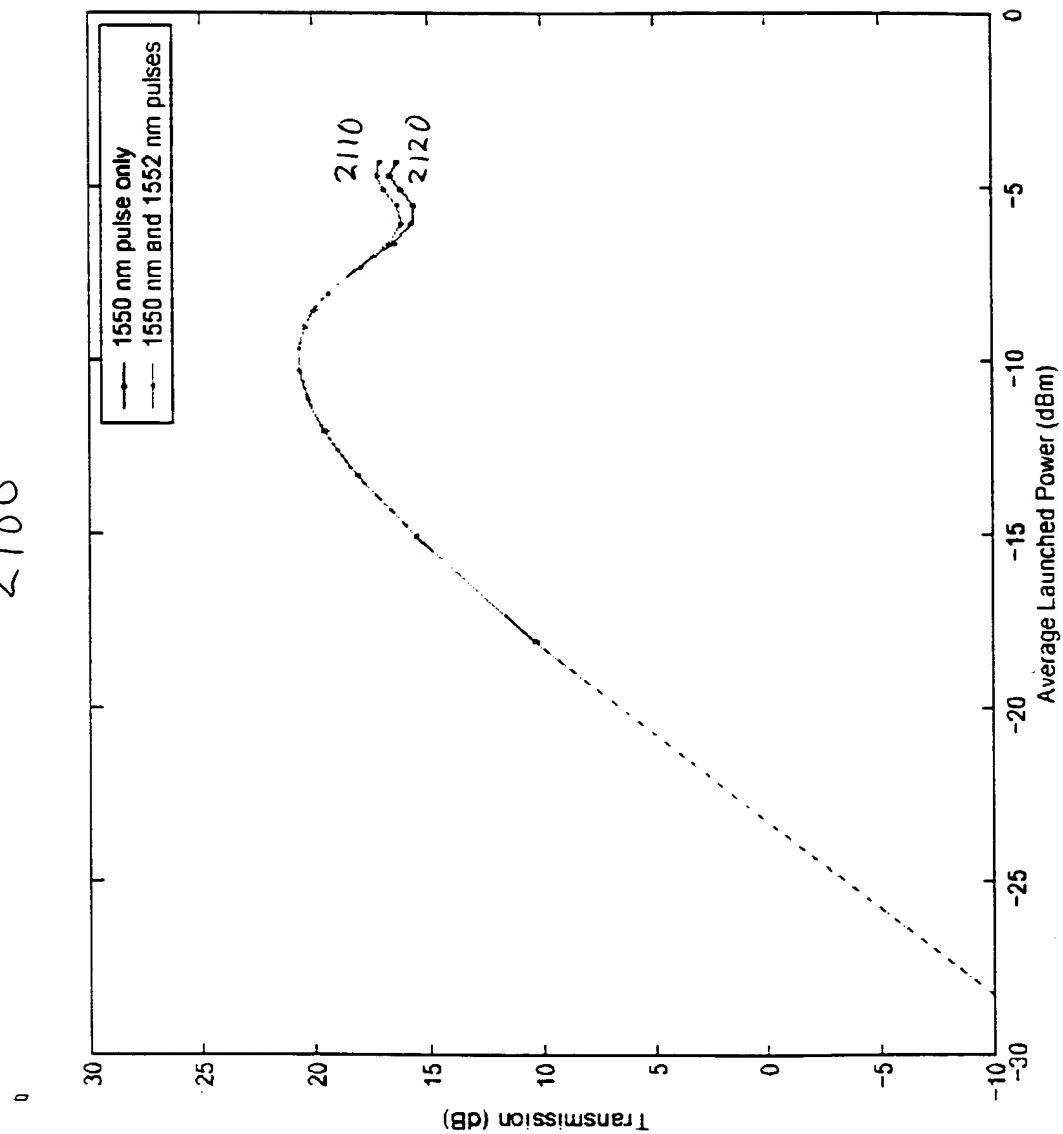


Fig. 21